

IOWA HIGHWAY RESEARCH BOARD

Minutes of March 22, 2002

Regular Board Members Present

R. Ettema
J. George
R. Gould
D. Julius
B. Keierleber

M. Nahra
J. Selmer
C. Van Buskirk
J. Weber
W. Weiss

Alternate Board Members Present

S. Andrlle for L. Greimann
F. Farmer for T. Myers
L. Jesse for K. Mahoney
B. Younie for J. Adam

J. Berger
T. Fonkert
G. Miller

Board Members With No Representation

R. Krauel

Secretary

M. Dunn

Visitors

Jenny Balis
Bob Given
Sara Buseman
Ed Engle
Sandra Larson
Mohammad Mujeeb
Bob Steffes
Roy Gu
Tom McDonald

*FHWA
Iowa Concrete Paving Association
Iowa Department of Transportation
Iowa Department of Transportation
Iowa Department of Transportation
Iowa Department of Transportation
Iowa Department of Transportation
Iowa State University
Iowa State University/CTRE*

The meeting was held in the Conference Room at the Iowa DOT Ames Drivers License Station, Ames, Iowa. The meeting was called to order at 9:00 A.M. by Wade Weiss.

Agenda review/modification

- Jim George moved to approve the agenda with no modifications. Doug Julius seconded. Carried with 12 yes, 0 no, and 0 abstaining.

Approval of the minutes

- Steve Andrlle moved to approve the minutes from the February 22, 2002 meeting with no additions or corrections. Rob Ettema seconded. Carried with 12 yes, 0 no, and 0 abstaining.

Discussion on TR-411, “An Improved Computer Program for River Valley Rating Curves”

- Mark Dunn reported that the issue of the incomplete computer program and extended contract for TR-411 was discussed with Dr. Al Austin. Dr. Austin agreed that the contract should be terminated and did not wish to address the board. The majority of the project budget was paid out; the retent (10%) was withheld.
- John Selmer moved to formally terminate the contract for TR-411 between Iowa State University and the Iowa DOT. Larry Jesse seconded. Carried with 12 yes, 0 no, and 0 abstaining.
- Mark Dunn will complete the necessary steps to formally terminate the contract.
- Mark Dunn added that Dave Claman is working with LaDon Jones, Digital Control Inc., and they will be bringing a proposal to the Board regarding full development of this program, as was discussed at the previous meeting.

Final, TR-453, “Low Water Stream Crossings”

- Roy Gu, Iowa State University, reviewed the types of low water stream crossings and factors that that effect selection of each different type; the research objectives, including survey current status (including literature search), update design criteria, recommend traffic control, and provide suggestions for selection, design, and construction; the design and construction flow chart; the graphs; and the conclusions of this research.
- This report used information, which is based on daily average flow, not the annual maximum instantaneous flow. There is no effect on this information from the USGS report currently in concern.
- It was noted that it is a benefit to have signage recommendations specified in the document.
- Brian Keierleber moved to accept the final report. Bob Younie seconded. Carried, 13 yes, 0 no, and 0 abstaining.

Review of Requests for Proposals (RFPs) for second solicitation for FY 01-02 and additional topic discussion

- Mark Dunn handed out the list of 2001 Project Solicitation Priorities, reviewed what has been addressed so far this year, and led discussion on the RFPs currently being considered.
- A couple of topics (identified below) were skipped in the initial round of RFPs to allow time for a literature search to be completed and give the Board a better idea of how to scope the desired research.
- The topic of “Training: Surveyors, Mechanics, & Technicians,” has been addressed outside of Board activity. Surveyor and Technician training are currently available through DMACC and CTRE and are just in need of getting the information to those in need. Discussion on the mechanics training is being addressed with DMACC currently. There may be some funding needs to develop the mechanics training. Funding needs and appropriate funding sources will be identified through further discussion with DMACC.
- With the topics of “PCC Admixture Compatibility” and “Identify Mix and Delivery Guidelines That Impact Quality of In-Place Concrete,” it is recommended that no action be taken on these at this time due to current research activities taking place at a national level.
- Steve Andrlle added more details on the direction that the MC² Group is trying to take with the topic of “Identify Mix and Delivery Guidelines That Impact Quality of In-Place Concrete.” The group, made up mostly of technicians from 10 different state DOTs, have agreed that this is a good idea and are now trying to coordinate funding from the 10 DOTs. There are also some earmarked funds available from Congress through the US PCC Center. There is nothing set yet, but there is work being done in this direction.
- Mark Nahra volunteered to coordinate a survey through the Service Bureau to check on the counties’ needs for the revision of simple span bridge standard plans, which is the next topic on the list of priorities.

Edge Rut & Earth Shoulder Maintenance

- Mark Dunn received the requested information for this RFP later than expected. District 2 and District 6 had formed process improvement teams to look at edge rutting. After he looks through the information, identifies successes and future needs, he will develop an RFP according to needs that may still exist. This will be e-mailed to the Board for input with the goal of sending it out with the current group of RFPs.

Bridge Approach Settlement Identification of the Best Practices for the Design, Construction, and Repair of Bridge Approach Sections

- This topic had been skipped earlier in the year with the intent to have a literature search done prior to developing an RFP. Mark Dunn handed out the findings of the literature search, which revealed an NCHRP national level synthesis, which identified several techniques that were used throughout the country for bridge approach settlement. This will be a useful tool to review and see what applies best in Iowa. He also handed out a slightly revised version of the RFP, which added an objective of looking at preventative maintenance strategies.
- No modifications were recommended.

Determination of the Optimum Base Characteristics for Pavements

- This topic had also been skipped earlier in the year with the intent to have a literature search done prior to developing an RFP. The information reviewing the findings of the literature search was handed out.
- It was the consensus of the Board to have an objective added which would look at the constructability issues.

Evaluation of Hot Mix Asphalt Moisture Sensitivity Using the Nottingham Asphalt Test Equipment

- In the second paragraph of this RFP, the wording will be changed to read, “By using the Nottingham Asphalt Test device, a single HMA specimen *may* be analyzed...” instead of *can*. That is the goal of the research and the way it was initially stated was misleading.
- Clarification was given on “equipment fabrication.” It is believed that the heads will have to be modified specific to this testing procedure.
- The information on range of aggregates will be discussed among the PI(s) and the DOT geology section.
- This project is specific to ISU due to the equipment being housed there. The hope is to possibly have Iowa State University and The University of Iowa work collaboratively to get the best research findings.

Mark Dunn will complete the next drafts for the RFPs and e-mail them to the Board for final review. They will be mailed out with the goal of reviewing the proposals at the June meeting.

Review of revised language in the cover letter sent with RFPs, to invite additional beneficial research

- It was agreed that the revised letter was well written. It was good to request that additional research be kept separate with both the objectives and the budget within the written proposal.

Review of IHRB Calendar of Activities

- It was stressed that with the new business plan, the calendar plays a critical role in completing the desired process each year. This year has run a bit behind schedule, but by the end of the fiscal year, things should be on track. Looking at the types of activities held at each meeting, it was mentioned that the May meeting could be a better choice for the annual traveling meeting instead of June.
- It was also expressed that the use of e-mail works well, helps get input back more timely, and keeps things moving more on schedule.

Review of change to the Business Plan language to allow clarification(s) from Principal Investigator(s) on non-competing solicited proposals

- The way it is worded leaves the option of handling things via telephone, or in person, open to the situation.

- Mark Nahra moved to approve the proposed change to the Business Plan. Christy Van Buskirk seconded. Carried with 14 yes, 0 no, and 0 abstaining.

New Business

Ideas were brought up for the upcoming brainstorming

- One topic mentioned was the work being done in Story County by CTRE. They have been making efforts to deal with obstructions in the right-of-way. Getting a process implemented to make a difference is where the challenge lies. A synthesis of other states' practices is a possible area of research.
- Another topic mentioned (request of the County Engineers' Association), which is being awaited legislatively, is the adaptation of the currently accepted NEEDS study process to a PC. It is an important issue to get that program so the Service Bureau could manage it off of the mainframe.

Research topics of interest for next fiscal year's priorities should be gotten together by focus groups and interest groups and given to Mark Dunn by the next meeting to assist in the timeliness of the business plan.

The Board will soon determine where the traveling meeting will be held for the year. Any member or alternate input should be given to Mark Dunn.

Bob Younie moved to adjourn. Mark Nahra seconded. Meeting adjourned.

Date of Next Meeting:

THE NEXT MEETING WILL BE HELD FRIDAY, APRIL 26, 2002 AT 9:00 A.M. IN THE LARGE MATERIALS CONFERENCE ROOM, AT THE IOWA DOT, CENTRAL COMPLEX, IN AMES, IOWA.

Mark Dunn, IHRB Secretary